**BUREAU OF THE Fiscal Service**
U.S. DEPARTMENT OF THE TREASURY

TRANSFORMING FEDERAL FINANCIAL MANAGEMENT

Reducing Reporting Burden for U.S. Federal Grants

The Bureau of the Fiscal Service provides the financial infrastructure for the federal government. The Bureau disburses payments, collects revenue and debt, provides financial reports, and finances activities by selling Treasury marketable securities and savings bonds.
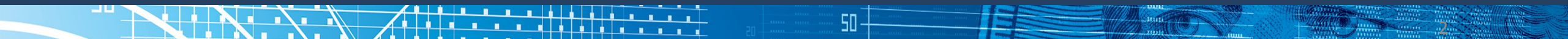
Disburses Payments

In FY2019, securely disbursed **1.2 billion** payments totaling more than **$3.7 trillion**, to more than 100 million people, with **96%** disbursed electronically.

Disburses **87%** of federal payments, include IRS tax refunds, SSA and Supplemental Security (SSI) benefits, OPM retirement benefits, Veteran's benefits, and vendor payments.

In FY2020, provided **163 million** Economic Impact Payments, worth more than **$273 billion** to Americans as part of the Coronavirus Aid, Relief, and Economic Security (CARES) Act.

Fiscal Service's Blockchain Journey

2017 - 2018

2018 - 2019

Physical Asset Tracking

Software License Tracking

Grant Payments

➢ Gave us a foundational understanding of DLT by exploring a low-risk use case.

➢ Expanded our understanding of what does, and does not make a good use case for blockchain

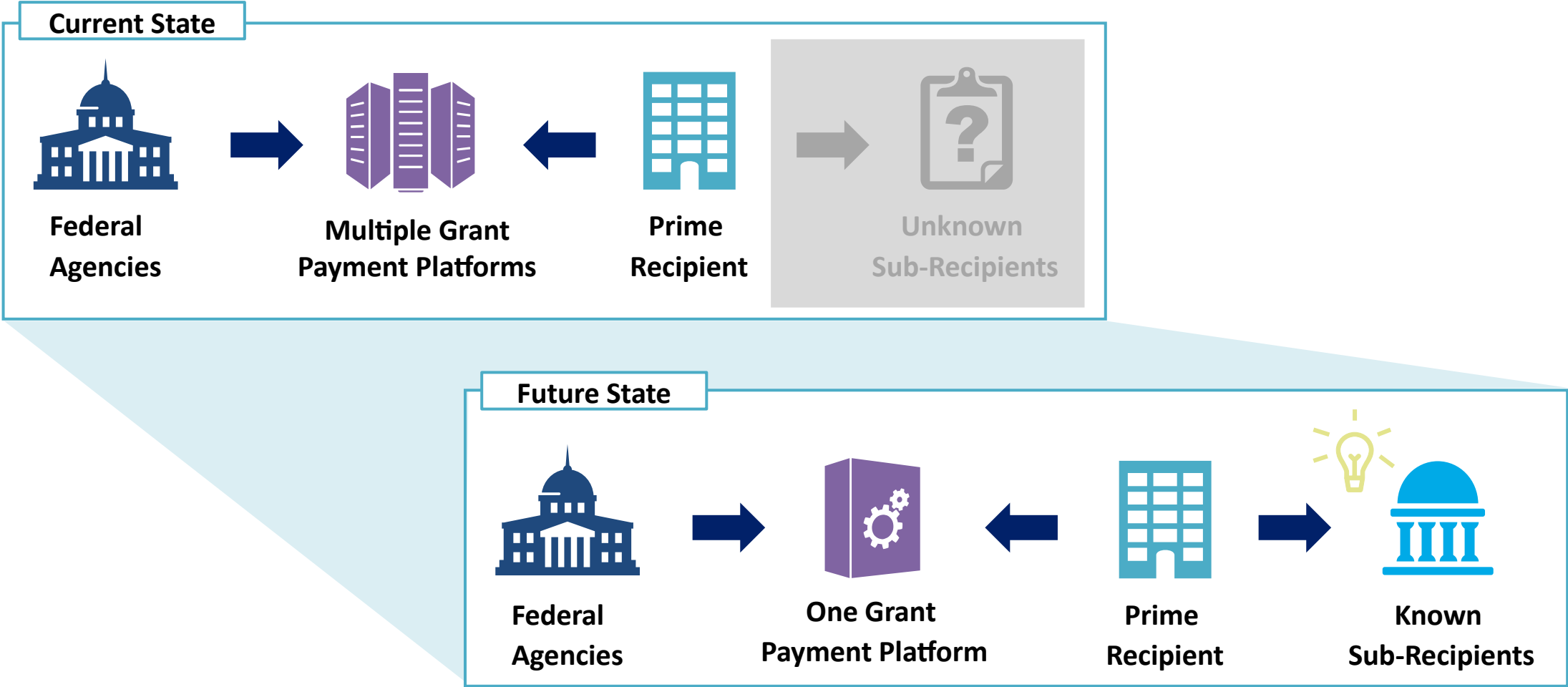➢ Explored how blockchain could be used to tokenize (digitally represent), transfer, and redeem a Federal payment.

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Reporting Burden Associated with Grants

Researchers spend 44% of their research time performing mandated administrative tasks*

* Reducing Administrative Burden in Federal Research Grants to Universities, IBM Center for the Business of Government, January 29th, 2020.

More Payment Visibility = Less Reporting Burden

Current State

Federal Agencies → Multiple Grant Payment Platforms ← Prime Recipient → Unknown Sub-Recipients

Future State

Federal Agencies → One Grant Payment Platform ← Prime Recipient → Known Sub-Recipients

"Tokenizing" a Grant Letter

A Grant Letter becomes "tokenized" by extracting, digitizing, and storing specific data elements onto a blockchain token where those data elements are permanently stored and can be transferred

NATIONAL SCIENCE FOUNDATION
Grant Letter

Award:1354193   PI Name:Moreau , Corrie

IOS-1354193   000
SUMMARY PROPOSAL BUDGET

Grant Letter Information and Payment Data are Digitized and Stored on the Token
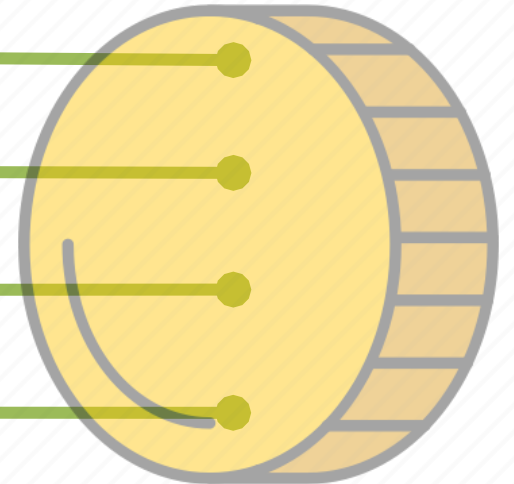
Blockchain Token

Grant Info

Key Dates

Awardee Information

Award Amount

Proof of Concept Workflow

The prototype demonstrates how Federal agencies can convert a grant award into a digital representation with unique properties and business rules for the transfer and redemption of the award, all which can be stored and tracked digitally.

DLT SYSTEM

0. Award a grant to a recipient

1. Convert grant award into a digital asset

2. Set internal controls (e.g. thresholds)

3. Request Drawdown

4. Redeem token / initiate payment

5. Streamline reporting

NEAR REAL-TIME DATA VISIBILITY

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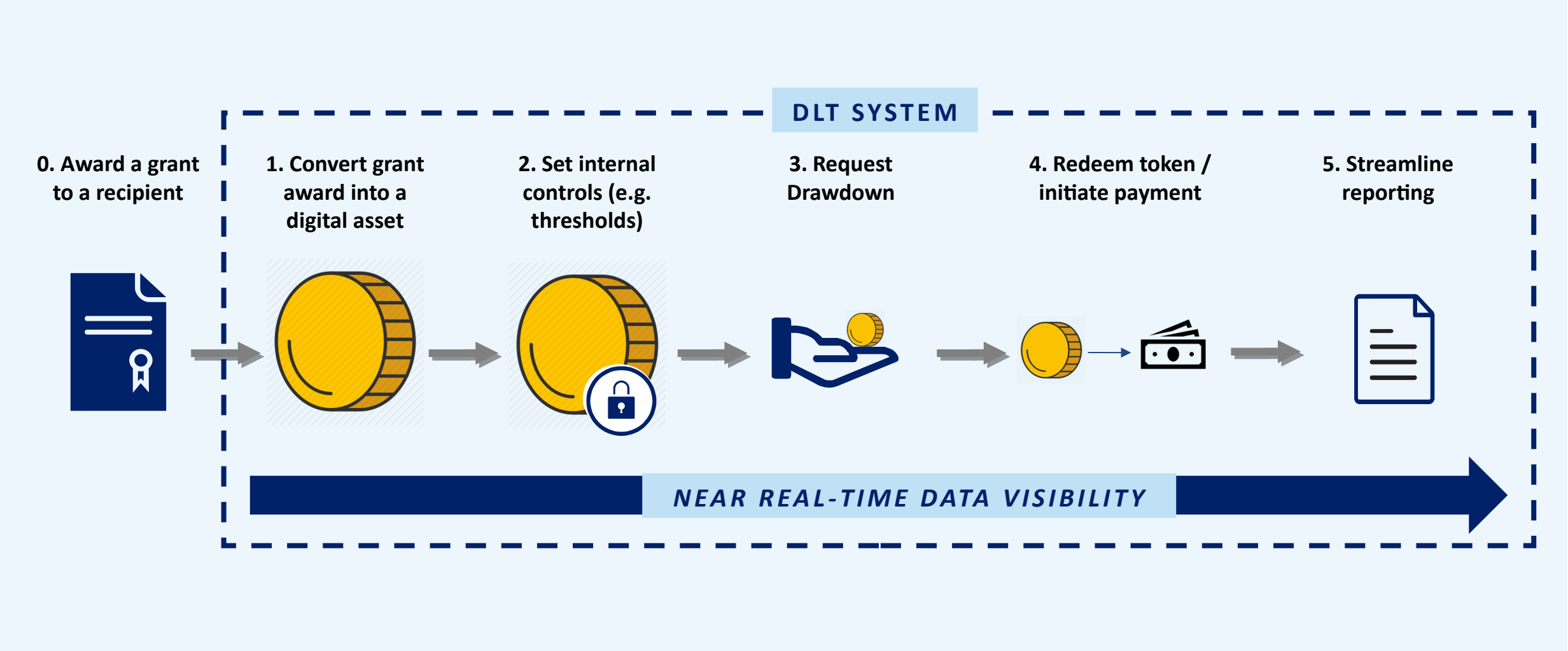
Blockchain-based Grant Payment "Clickable Prototype"

This clickable prototype allows us to share the process flow and concepts of the prototype with greater audiences to receive their input.
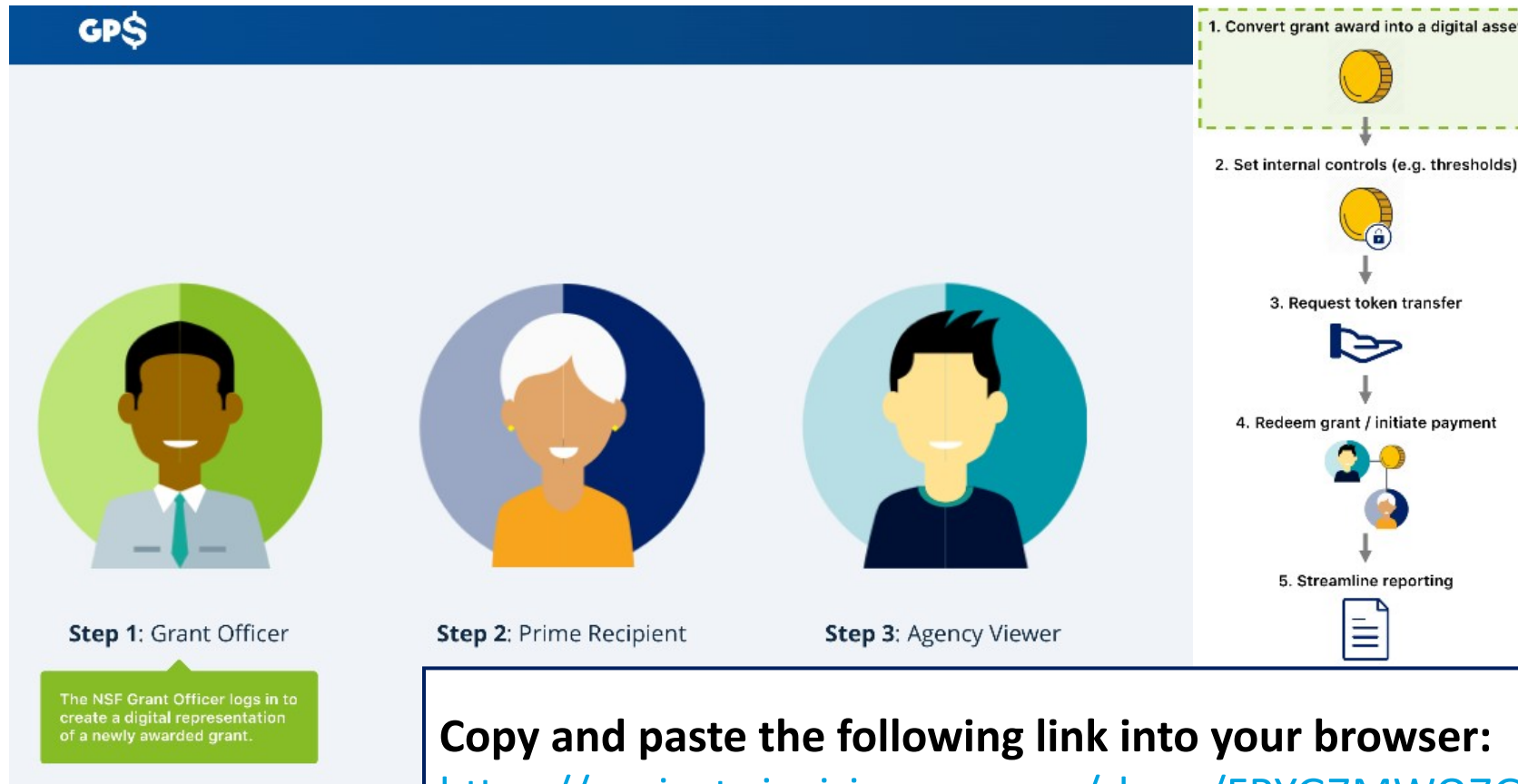
Copy and paste the following link into your browser:
https://projects.invisionapp.com/share/FRYG7MWQ7GV
Password: fit_gps

Project Outcomes and Findings

Outcomes

- **Validated solution with stakeholders:** Business and technical stakeholders validated the business problem the technical feasibility of the solution design.

- **Uncovered statutory and technical findings:** Subject matter experts revealed key considerations for moving beyond a Minimum Viable Product (MVP).

- **Developed clickable prototype and enhanced MVP:** Stakeholders were able to experience the MVP via a clickable protype and four enhancements were added to the MVP based on user feedback.

- **Deployed FIT's first innovation sandbox:** The enhanced MVP was successfully deployed in FIT's sandbox environment.

Findings

- **Statutory disbursement authority:** There is no authorization enabling an Agency to directly pay a sub-grantee.

- **DLT compliance with Federal IT standards:** DLT protocols, token standards, and digital wallets have yet to receive NIST approval.

- **Converting a token into a payment file:** FIT and partner agencies must determine how the token will flow to an Agency financial system.

- **Accounting treatment:** Tokens are not recognized as cash making their treatment under existing guidance unclear.

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Proposed Next Steps

The team identified four immediate next steps to advance FIT's goal of using DLT to facilitate a federal grant payment.

Fiscal Service | NSF

1) BUSINESS CASE AND PILOT PLAN

Develop a business case laying out a path to production, that includes a concept of operations, pilot project scope, alternatives analysis, core questions to be answered and an ROI analysis.

2) TECHNICAL UNDERSTANDING

Collaborate with NIST to evaluate multi-agency ATO requirements, node hosting and required infrastructure for DLT solutions.

3) EXPAND THE ECOSYSTEM

Expand the ecosystem to target additional agencies, OMB and end-users to help support the business plan, pressure test the blockchain application, and address regulatory hurdles (i.e., sub-recipient payment issue).

4) EXPLORE CONNECTIVITY

Establish API connectivity between the DLT system and NSF financial system and prime grantee.

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